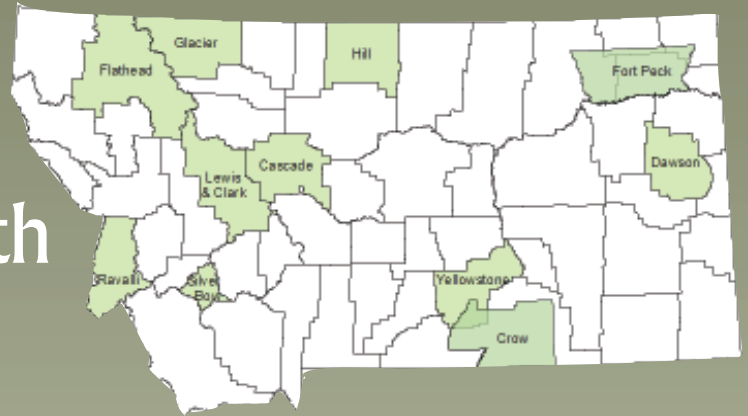


2004 Community Environmental Health Assessments



Montana Environmental Public Health Tracking Project



Introduction/Background

The Environmental Public Health Tracking Project (EPHT) contracted with nine county-based and two tribal-based health departments to conduct Community Environmental Health Assessments within their jurisdictions. The assessment work occurred between October 2003 and September 2004. The 11 contractors (listed below) represented 50.6% of Montana's total population and 51.5% of Montana's American Indian population. They included both rural and urban areas and were quite evenly distributed geographically throughout Montana.

1. Butte Silver-Bow County
2. Cascade County
3. Crow Tribal Health
4. Dawson County
5. Flathead County
6. Fort Peck Tribal Health
7. Glacier County
8. Hill County
9. Lewis & Clark County
10. Ravalli County
11. Yellowstone County

Methods/Discussion

EPHT was not prescriptive about the way the assessments were conducted. Instead, each contractor was allowed flexibility in choosing the methodology that best suited their community, and that would identify environmental health (EH) concerns from a broad cross-section of their population. Some contractors chose to conduct phone surveys, while others asked citizens to complete written surveys or questionnaires and then hosted face-to-face discussions or focus groups. The contractors either formed citizen-based Environmental Health Assessment Teams, or asked their Boards of Health or their Health Department staff to serve as Advisory Groups for their projects. They used their Advisory Groups in a variety of ways and had differing levels of involvement from members.

Once assessment survey data and other information was collected, the contractors analyzed and organized the results into a ranked list of the EH concerns identified by the citizens of their community. The Advisory Groups and/or Boards of Health then took the ranked list and prioritized the concerns for some specific local action. As was expected, the priority list was frequently in a different order from the ranked list. This was because the decision makers had to consider various community specific constraints and factors (legal, economic, scientific, social and political) when setting the priorities.

Lastly, the contractors documented their assessment process, findings, prioritized list, and recommended action steps in a final report.

Throughout the one-year project the contractors received extensive training and technical assistance from EPHT specific to conducting the various assessment components.

Results/Conclusions

The Community EH Assessments were positive and worthwhile projects for both EPHT and the local health agencies. The obvious primary benefit of the assessment work was the successful collection of community-based information about EH concerns and the development of some action steps to address them. The following section provides a brief synopsis of each of the 11 community environmental health assessment projects. The synopses include a description of the assessment tools used, the ranked list of EH concerns, the list of priority issues, and recommended action steps.

The assessment process itself also resulted in many valuable secondary benefits:

- Local health agency support/understanding of the need to integrate public health and environmental data increased.
- Community-level awareness about EH issues increased.
- The tribal and county health agencies were able to be proactive.
- The process involved/engaged new groups of citizens.
- New EH issues of concern were identified.
- The process helped identify where EH education is needed at the state, tribal and county level.
- Staff and volunteers developed new assessment skills.
- Local health agencies increased their capacity to conduct assessment work.
- Lessons learned from these contractors have been passed on to future contractors.

During 2005 EPHT is funding two tribal health departments and one county health department to conduct community EH assessments. These new contractors are already learning and benefiting from the experiences of their 11 predecessors.

Butte-Silver Bow County Environmental Health Assessment Synopsis September 2004

Total County Population: 34,606¹
Non-Hispanic White: 93.7%
American Indian: 2.0%
Hispanic/Latino: 2.7%
Other: 1.6%



Largest Community: Butte
Lead Agency: Butte-Silver Bow County Health Department
Advisory Group: Environmental Health Assessment Committee

Environmental Health Definition: The environment is everything around us - the air we breathe, the water we drink and use and the food we consume. It is also the chemicals, radiation, microbes, and physical forces with which we come into contact. Environmental health and protection is the art and science of protecting against environmental factors that adversely impact human health or the ecologic balances, whether in the natural or man-made environment. In considering these issues, we must assure the fair treatment and meaningful involvement of all people, regardless of race, ethnicity, culture, income, or educational level with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. We must also ensure that no population is forced to shoulder a disproportionate burden of the negative human health and environmental impacts of pollution and other environmental hazards.

Key Assessment Tools: The citizen-based Environmental Health Assessment Committee developed a survey after exploring local issues (other than Superfund-related issues). About 12,000 surveys were mailed to residents with their water bills. Another 3,000 were distributed at public agencies, in county employee paychecks, on a website, at committee member worksites, and in rural communities. 2,603 completed surveys were obtained.

Top 10 Environmental Health Issues of Concern from 2,603 Responses

- | | |
|------------------------------------|--|
| 1. Illegal Drug Distribution | 6. Effect of Meth Use on Users |
| 2. Vandalism | 7. Drought |
| 3. Illegal Drug Manufacturing | 8. Condition of Streets & Alleys |
| 4. Effect of Meth on the Community | 9. Water Quality - Clarity |
| 5. Water Quality - Taste | 10. Trash in Public Areas/Abandoned Property |

Top 9 Environmental Health Priorities

- | | |
|---|---|
| 1. Illegal Drug Manufacture, Distribution and Use (Particularly Methamphetamines) | |
| 2. Vandalism | 6. Trash in Public Areas/Abandoned Property |
| 3. Drought | 7. Incidence of Disease |
| 4. Water Quality Taste & Clarity | 8. Loose and Un-Cared For Dogs |
| 5. Conditions of Streets and Alleys | 9. Wildfire |

¹2000 U.S. Census

Butte-Silver Bow County Assessment Synopsis (Continued)

Recommended Priorities for Action (Numbers correspond to the Health Priorities)

1. Reinststate D.A.R.E. and the Community Watch Program; Support Legislation to fund Meth lab cleanup; Seek funding to address illegal drugs; Increase law-enforcement personnel; and, Develop a Comprehensive Plan to address drug-use issues.
2. Promote school programs (coloring contests and "owl" program) and Beautify Butte Campaigns that involve parents and kids; Promote cleanup days especially around schools; Enforce curfews; and, Focus community service on repairing vandalism.
3. Implement emergency measures such as stricter water rationing; Establish a voluntary Lawn Replacement Program and awards for water conserving landscaping; Coordinate drought action with emergency and disaster planning; and, Add water meters.
4. Continue improving the municipal water system infrastructure for treatment and filtration and change the chlorine injection method.
5. Continue paving rural roads with recycled asphalt to reduce dust.
- 6a. Purchase new garbage cans with locking lids and build can racks with recycled wood from abandoned buildings; Adopt a more aggressive recycling program; Include alley trash vacuuming in garbage contract; and, Reestablish the Adopt a Highway Program with Service Clubs.
- 6b. Develop an Urban Homesteading Program; Work with the Historic Preservation Office to address abandoned historic properties; and, Develop enforceable demolition criteria.
7. Collect data from local doctors regarding disease incidence and determine how to research and study the issue further; Engage the necessary expertise to analyze the links between environmental conditions and disease; and, Establish a community environmental health awareness program.
8. Facilitate more spay and neuter clinics and require that dogs adopted from the shelter be spayed or neutered and vaccinated; Pass a pooper scooper ordinance; and, Create a Dog Exercise Park.
9. Work with the Emergency and Disaster Services Hazard Mitigation Plan; Work with the state forestry program to identify resources for private land owners; work with the BLM and Forest Service's Wildland Urban Interface Programs; and, Promote prescribed burning and harvesting when appropriate.

Cascade County Environmental Health Assessment Synopsis September 2004

Total County Population: 80,357¹
Non-Hispanic White: 89.5%
American Indian: 5.7%
Hispanic/Latino: 2.4%
Other: 2.4%



Largest Community: Great Falls
Lead Agency: Cascade City-County Health Department
Advisory Groups: City-County Board of Health
Environmental Health Staff

Key Assessment Tool: An Environmental Health Survey was mailed to 1,500 randomly selected households by a University of Great Falls professor. A total of 280 useable survey responses were received.

Top 10 Environmental Health Issues of Concern to CASCADE COUNTY

- | | |
|--------------------|--------------------------------------|
| 1. West Nile Virus | 6. Leaking Underground Storage Tanks |
| 2. Hantavirus | 7. Secondhand Smoke |
| 3. Pesticides | 8. Mining Runoff |
| 4. Herbicides | 9. Hazardous Waste Disposal |
| 5. Oil Refining | 10. Nuisance Properties |

Top 10 Environmental Health Issues of Concern to FAMILY/HOUSEHOLD

- | | |
|------------------------------|------------------------------|
| 1. West Nile Virus | 6. Oil Refining |
| 2. Hantavirus | 7. Pollens |
| 3. Dust & particulates | 8. Herbicides |
| 4. Carbon Monoxide from cars | 9. Restaurant Food Practices |
| 5. Secondhand Smoke | 10. Pesticides |

Top Four Environmental Health Priorities

1. Groundwater & Surface Water Pollution (pesticide, herbicide, & septic systems)
2. Indoor Air Pollutants (secondhand smoke, pollens, CO, radon, and asbestos)
3. Food Safety Practices (primarily restaurants)
4. Information and Referral for Environmental Issues

Recommended Priorities for Action

1. Assemble detailed water quality and quantity maps of county aquifers. Collaborate with the Montana Bureau of Mines and Geology and DEQ.
2. Emphasize secondhand tobacco smoke as an indoor air pollutant in 2005.
3. With the FDA, complete an assessment of the County's food inspection program.
4. Develop an informational document about environmental health concerns and how they are addressed.

¹2000 U.S. Census

Crow Tribal Health Board Environmental Health Assessment Synopsis September 2004

Crow Reservation Population: 6,890¹
American Indian: 75%
White: 23%
Other: 2%



Largest Community: Crow Agency
Lead Agency: Crow Tribal Health Board
Advisory Groups: Crow Tribal Health Board and the Director of the Indian Health Services Environmental Department

Key Assessment Tool: Responses to an Environmental Health Concerns Survey were obtained at the Crow Health Fair, the Indian Health Services Hospital, and from the Tribal Website. Additionally, Health Board members went door to door within their Districts, and Little Big Horn College Summer Internship Students completed the survey in the Hardin area. A total of 410 useable survey responses were obtained.

Top 15 Environmental Health Issues of Concern From 410 Survey Responses

1. Cleanliness of Surface Water (Rivers/Lakes)
2. Methamphetamine/Crack Houses Contamination
3. Trash and Litter
4. Amount of Available Surface Water (Rivers/Lakes)
5. Neighborhood Security
6. Roads and Highway Maint. & Safety
7. Insect Control
8. Mold in Houses
9. Use/Storage/Disposal of Chemical
10. Dog/Animal Control
11. Land Use: Placement of New Homes/Businesses
12. Indoor Air Pollution (Secondhand Smoke, Radon)
13. Safety of Community Drinking Water Supply
14. Outdoor Air Pollution (Dust, Vehicle Emissions)
15. Adequacy of Community Sewage Disposal

Top Five Environmental Health Priorities

1. Safety of Community Drinking Water Supply
2. Outdoor Air Pollution (Dust, Vehicle Emissions)
3. Adequacy of Community Sewage Disposal
4. Land Use: Placement of New Homes/Businesses
5. Dog/Animal Control

Recommended Priorities for Action: The survey results and prioritized list will serve as a catalyst for further discussion for all involved.

¹2000 U.S. Census

Dawson County Environmental Health Assessment Synopsis September 2004

Total County Population: 9,059¹
Non-Hispanic White: 97.0%
American Indian: 1.2%
Other: 1.8%



Largest Community: Glendive
Lead Agency: Dawson County Health Department
Advisory Groups: Dawson County Board of Health
Community Brainstorming Group

Environmental Health Definition: Environmental Health focuses on the health interrelationships between people and their environment, promotes human health and well being, and fosters a safe and healthful environment. The environment is everything around us - the air we breathe, the water we drink and use, and the food we consume.

Key Assessment Tool: Environmental Health Surveys were administered to county residents at the Richey Blood Drawing, County Health Fair, Glendive Agricultural Trade Expo, Dawson County and Richey High Schools, and the Glendive Medical Center. A total of 422 responses were received. Seven Focus Groups involving 91 participants provided greater details about the top issues of concern.

Top 9 Issues of Concern From 422 Survey Responses and 7 Focus Groups

- | | |
|---|---------------------|
| 1. Water Quality | 6. Traffic |
| 2. Economic Environment/Apathy | 7. Secondhand Smoke |
| 3. Lagoon/Air Quality | 8. West Nile Virus |
| 4. Trash/Litter | 9. Cancer |
| 5. Community Attitude Towards Alcohol/Drugs/Tobacco | |

Top Five Environmental Health Priorities

1. Community Attitude Towards Alcohol/Drugs/Tobacco
2. Economic Environment
3. Water Quality
4. Secondhand Smoke
5. Cancer

Recommended Priorities for Action

1. Continue to support the prevention work of the Healthy Communities Coalition.
2. Share the prioritized assessment results with the Economic Development Council.
3. Provide public education about water quality threats, well testing and disinfection.
4. Continue to support the work of the County Tobacco Use Prevention Program.
5. Continue to provide public education on cancer prevention and early detection.

¹2000 U.S. Census

Flathead County Environmental Health Assessment Synopsis September 2004

Total County Population: 74,471¹
Non-Hispanic White: 95.4%
American Indian: 1.1%
Hispanic/Latino: 1.4%
Other: 2.1%



Largest Community: Kalispell

Lead Agency: Flathead County Health Department

Advisory Group: Flathead County Health Department Staff, Health Board Members and Community Group Representatives

Environmental Health Definition: Environmental Health is the public health practice that prevents disease, injury and illness associated with environmental agents and assures healthy environmental conditions.

Key Assessment Tool: A survey was administered randomly by phone to Flathead County residents by a professional pollster. A total of 400 surveys were completed.

Top 10 Environmental Health Issues of Concern From 400 Survey Responses

- | | |
|------------------------|----------------------|
| 1. Air Quality | 6. Environmentalists |
| 2. Water Quality | 7. Forest Fires |
| 3. Don't Know | 8. Logging/Timber |
| 4. Pollution (General) | 9. Mining |
| 5. Asbestos | 10. Chemicals |

Top Environmental Health Priorities and Recommended Priorities for Action

The Flathead County Board of Health has not yet reviewed the data and established a list of priorities or recommended action steps.

¹2000 U.S. Census

Fort Peck Tribal Health Board

Environmental Health Assessment Synopsis

September 2004

Fort Peck Reservation Population: 10,321¹

American Indian:	62%
White:	35%
Other:	3%



Tribal Agency Headquarters:	Poplar
Largest Community:	Wolf Point
Lead Agency:	Fort Peck Tribal Health
Advisory Groups:	Environmental Health Assessment Advisory Board

Key Assessment Tool: Over 600 Environmental Health Surveys were distributed to reservation residents by the Tribal Health Department Community Health Representatives, Outreach Workers, and the Health Educator. The surveys were distributed at homes, worksites, and Pow Wows. A total of 409 survey responses were received.

Top 5 Environmental Health Issues of Concern From 409 Survey Responses

1. Methamphetamine Labs (Contamination)
2. Water Quality of Rural and Community Water Supplies
3. Insect/Pest Control
4. Hazardous Materials and Waste
5. Littering (Roads and Streets)

Top Five Environmental Health Priorities

1. Methamphetamine Labs (Contamination)
2. Water Quality Issues
3. Insect/Pest Control
4. Littering (Roads and Streets)
5. Hazardous Waste

Recommended Priorities for Action:

1. Methamphetamine Labs - Refer to the C.I.s, Police and Environmental Health Department.
2. Water Quality Issues - Refer to the Water Resources Office/MRI Pipeline Project.
3. Insect/Pest Control - Refer to the Housing Department, Environmental Health and Office of Environmental Protection.
4. Littering - Refer to the Environmental Health Office.
5. Hazardous Waste- Refer to the Environmental Health Office.

¹2000 U.S. Census

Cut Bank High School District in Glacier County Environmental Health Assessment Synopsis September 2004

Total District Population: 4,597¹
Non-Hispanic White (Cut Bank): 83%²
American Indian (Cut Bank): 14%
Two or More Races (Cut Bank): 3%



Largest Community: Cut Bank
Lead Agency: Glacier County Health Department
Advisory Groups: Glacier County Health Board
Selected Community Members

Environmental Health Definition: Environmental Health is the factors of your surroundings that contribute your health.

Key Assessment Tool: A total of 1,500 Environmental Health Assessment Surveys were distributed through public agencies, public places, local businesses, newspapers, and the high school. 227 surveys were completed and returned to the Health Department.

Top Five Environmental Health Issues of Concern From 227 Surveys

1. Drug Abuse
2. Drinking Water Quality
3. Alcohol Abuse
4. Mosquitoes
5. Availability of Recycling Programs

Top Four Environmental Health Priorities Based on Age Groups

1. Drug and Alcohol Abuse (#1 for all ages)
2. Drinking Water Quality (#2 for all ages)
3. Pests (#3 for ages under 21)
School Violence (#3 for ages 21 - 64)
Feral or Loose Animals (#3 for ages over 64)
4. Availability of Recycling Programs (#4 for all ages)

Recommended Priorities for Action

1. Present findings to entities best equipped to address the concerns such as Cut Bank High School Board, City Planning Committee, County Commission, Glacier Action and Involvement, Golden Triangle Mental Health, and the Drug Task Force.
2. Conduct public education.

¹U.S. Department of Education Bureau of Census

²2000 U.S. Census

Hill County Environmental Health Assessment Synopsis September 2004

Total County Population: 16,673¹
Non-Hispanic White: 79.5%
American Indian: 17.3%
Other: 3.2%



Largest Community: Havre
Lead Agency: Hill County Public Health Department
Advisory Groups: Hill County Health Consortium
Community Environmental Health Assessment Team

Environmental Health Definition: Environmental Health includes everything in our human environment that affects how we live. It has three main aspects: 1) Ecology - defined as the quality of water, air, and soil; 2) Social Environment - defined as your safety, your security and your ability to access services and to participate freely in your community; and 3) Infrastructure - services, facilities, and structure provided by the greater community.

Key Assessment Tool: An Environmental Health Survey was conducted via phone, face-to-face polling at the County fair and on the Rocky Boy's Reservation, and by making the survey available on the County website. A total of 302 useable responses were received.

Top 10 Environmental Health Issues of Concern From 302 Survey Responses

- | | |
|--|----------------------------------|
| 1. Methamphetamine Labs | 6. Water Availability in General |
| 2. Medical Care Availability | 7. Secondhand Cigarette Smoke |
| 3. Drug and Alcohol Abuse | 8. Lack of Affordable Housing |
| 4. Pests and Their Associated Diseases | 9. Groundwater Pollution |
| 5. Drinking Water Quality | 10. Safe Places for Children |

Top 10 Environmental Health Priorities

- | | |
|------------------------------|--|
| 1. Water Availability | 6. Indoor Air Quality |
| 2. Drug and Alcohol Abuse | 7. Drinking Water Quality |
| 3. Methamphetamine Labs | 8. Pests and Their Associated Diseases |
| 4. Safe Places for Children | 9. Groundwater Pollution |
| 5. Medical Care Availability | 10. Lack of Affordable Housing |

Recommended Priorities for Action

1. Continue EH Team work and carry out the action steps.
2. Include Blaine County in their EH efforts & grow new "CEHA" groups in other counties.
3. Continue work on cancer rates and educate the public about water issues.
4. Draft letters to decision makers in support of the Saint Mary's Water Project.
5. Strategize ways to alleviate distrust about Tiber Dam and N. Cent. MT water projects.
6. Obtain Computer Mapping Programs and provide training for 3-5 people to map data.
7. Develop locally appropriated indicators and begin tracking local data.
8. Continue community photo assessment of "Environmental Likes and Dislikes."

¹2000 U.S. Census

Lewis & Clark County Environmental Health Assessment Synopsis September 2004

Total County Population: 55,716¹
Non-Hispanic White: 94.4%
American Indian: 2.0%
Other: 3.6%



Largest Community: Helena
Lead Agency: Lewis and Clark City-County Health Department
Advisory Group: Lewis and Clark City-County Board of Health

Environmental Health Definition: Environmental Health is the relationship between people and their environment. It promotes human health and well-being, and fosters a safe and healthful place to work, live, and play.

Key Assessment Tools: Environmental Health Community Assessment Surveys were mailed to 1,435 rural residents and 267 completed responses were received. Additionally, in Helena, 500 citizens completed the survey when randomly polled at grocery stores, Carroll College, and the Capital Hill Shopping Mall. After the survey information was compiled, four focus groups involving 20 total participants provided more details about why the identified issues might be of such concern to residents and what might be done to address them.

Top 5 Environmental Health Issues of Concern From 767 Survey Responses

1. Illegal Drug Labs (Particularly Methamphetamine Labs)
2. Outdoor Air Quality
3. Drinking Water Quality
4. Indoor Air Quality
5. Water Conservation

Community Decay ranked No. 1 in the rural communities of Augusta and Lincoln.

Top 5 Environmental Health Priorities

1. Illegal Drug Labs (Particularly Methamphetamine Labs)
2. Outdoor Air Quality
3. Drinking Water Quality
4. Indoor Air Quality
5. Water Conservation

Recommended Priorities for Action

1. Use the survey and focus group information to hone public outreach and education.
2. Advocate for statewide guidance on cleaning up meth labs.
3. Determine what is necessary for the Board of Health to assess program needs and allocate resources to address real or perceived needs.

¹2000 U.S. Census

Ravalli County Environmental Health Assessment Synopsis September 2004

Total County Population: 36,070¹
Non-Hispanic White: 95.5%
American Indian: .9%
Hispanic/Latino 1.9%
Other: 1.7%



Largest Community: Hamilton
Lead Agency: Ravalli County Health Department
Advisory Groups: Community Environmental Health Assessment Team

Key Assessment Tool: An Environmental Health Survey was conducted via phone, face-to-face polling, and survey drop offs, and by making the survey available on the County website. A total of 235 useable responses were received.

Top 10 Environmental Health Issues of Concern From 235 Survey Responses

1. Long-term degradation of groundwater from any polluting source
2. Lack of access to affordable health care
3. Proximity of private septic systems to private wells/surface water contamination
4. Surface water contamination from any polluting source
5. Burning man-made materials
6. Alcohol/drug related problems
7. Pedestrian and traffic issues
8. Second-hand tobacco smoke
9. Agricultural use of pesticides
10. Right of way/roadside spraying of pesticides/herbicides

Top Environmental Health Priorities and Recommended Priorities for Action

The Ravalli County Board of Health has not yet reviewed the data and established a list of priorities or recommended action steps.

¹2000 U.S. Census

Yellowstone County Environmental Health Assessment Synopsis September 2004

Total County Population: 129,352¹
Non-Hispanic White: 91.0%
American Indian: 3.1%
Hispanic/Latino Origin: 3.7%
Other: 2.2%



Largest Community: Billings
Lead Agency: Yellowstone City-County Health Department
Advisory Group: Yellowstone City-County Health Department Staff

Environmental Health Definition: Environmental Health is the health interrelationships between people and their environment.

Key Assessment Tools: A Survey Questionnaire was administered randomly by phone to County residents by a MSU-Billings professor and his students. A total of 407 questionnaires were completed. Presentations were also given to 10 community groups who were underrepresented in the survey to get their viewpoint on the issues.

Top 9 Environmental Health Issues of Concern From 407 Survey Responses

- | | |
|--|--|
| 1. Leaks/Spills from Underground Tanks | 6. Handling of Hazardous Materials |
| 2. Drinking Water Quality | 7. Chemical Runoff (Ag, Lawns, Industry) |
| 3. Food Safety in Restaurants & Stores | 8. Lack of Recycling Programs |
| 4. Litter along Roads & Public Places | 9. Sewage Disposal |
| 5. Outdoor Air Quality | |

Top 7 Environmental Health Priorities

1. Food Safety in Restaurants and Grocery Stores
2. Handling of Hazardous Materials
3. Outdoor Air Quality
4. Drinking Water Quality (Leaks/Spills from Underground Tanks and Chemical Runoff)
5. Solid Waste (Litter Along Roads and Public Places and Lack of Recycling Programs)
6. Sewage Disposal
7. Indoor Air Quality

Recommended Priorities for Action

1. Consider implementing a full PACE-EH process building on the survey results.
2. Create a County Food Safety Advisory Group.
3. Develop a food-borne illness surveillance system and database.
4. Develop educational materials about handling hazardous materials in cooperation with other agencies.
5. Review local responsibilities for the County Air Pollution Control Program.
6. Further investigate if water quality concerns are actual or perceived risks.

¹2000 U.S. Census

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